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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,607	08/02/2002	Manfred Rothhardt	32860-000283/US	9049
30596	7590	06/17/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			CAPUTO, LISA M	
P.O.BOX 8910			ART UNIT	
RESTON, VA 20195			PAPER NUMBER	
			2876	

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,607

Applicant(s)

ROTHHARDT ET AL.

Examiner

Lisa M Caputo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 061104.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Preliminary Amendment

1. Receipt is acknowledged of the amendment filed 8 March 2002.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: Reference number 41 appears in the specification in paragraph 21, line 5 but does not appear in the Figures.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Beall et al. (WO 97/26572, from hereinafter "Beall").

Regarding claim 1, Beall teaches a method for producing an optical grating on an optical conductor that comprises durably fixing the conductor (optical fiber 24) at least at two fixing points (points 30 and 32) arranged at a distance from one another, and producing the grating (reflective grating 26) on the fixed conductor between the fixing points (see Figure 1, page 9, lines 5-17; page 10 line 29 to page 11 line 3).

Regarding claim 3, Beall teaches that the optical fiber is stressed between the fixing points during the production of the grating (i.e. mounting the fiber under tension) (see page 10 line 29 to page 11 line 3).

Regarding claim 4, Beall teaches an arrangement that comprises a carrier body (20), an elongated optical conductor (optical fiber 24), and an optical grating (reflective grating 26), wherein the conductor is fixed at least at two fixing points (points 30 and 32) arranged at a distance from one another on the carrier body, and wherein the conductor is durably fixed on the carrier body at the fixing points, and wherein the grating is a grating which is produced after the durable fixing of the conductor on the carrier body (see Figure 1, page 9, lines 5-17; page 10 line 29 to page 11 line 3).

Regarding claims 5-6, Beall teaches that at least one optical grating is a Bragg grating (reflective grating 26) (see Figure 1, page 9, lines 5-17).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beall et al. (WO 97/26572, from hereinafter "Beall").

Regarding claim 2, Although Beall fails to specifically teach that the optical conductor is stress-free between the fixing points during the production of the grating, Beall does teach that when performing the fabrication, the proper choice of tension assures that the fiber is not under compression at all anticipated use temperatures. The required degree of tension to compensate for the negative expansion in a particular application can readily be calculated by those with skill in the art (see page 9, lines 13-17).

Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to be able to use the method of Beall and ordinary skill in the

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art to calculate the correct tension in a fiber for optimal mounting and production, which depending on the temperature range, is a stress-free tension.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 5,694,503 to Fleming et al. which teaches an article comprising a temperature compensated optical fiber refractive index grating.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Lisa M. Caputo** whose telephone number is **(571) 272-2388**. The examiner can normally be reached between the hours of 8:30AM to 5:00PM Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached at **(571) 272-2398**. The fax phone number for this Group is (703) 872-9306.


Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [lisa.caputo@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.



LMC

June 11, 2004



MARK TREMBLAY
PRIMARY EXAMINER